



Product Component

DEFINITION

<i>Name</i>	Switch – Managed
<i>Description</i>	A switch is a network device that provides physical connection points to form multiple network segments. It operates at the Data Link Layer (Layer 2) of the Open Systems Interconnection (OSI) model. Switches are capable of inspecting the data packets, determining the source and destination device of that packet based on a physical (Media Access Control or MAC) address, and forwarding that packet to the appropriate port. Switches are used to limit broadcast domains.
<i>Rationale</i>	Switches provide the basic physical connectivity and communication between network devices on multiple network segments. They provided scalability, security, and manageability to a network. Cisco Systems has been established as the statewide standard manufacturer for networking products by the State of Missouri. Expansion of all existing networks shall utilize Cisco products. State agencies utilizing other manufacturer's products may be maintained or replaced. However, expansion of such networks shall utilize Cisco products.
<i>Benefits</i>	Switches provide the following benefits: <ul style="list-style-type: none"> • Multiple network connection points • Improves network utilization compared to hubs • Allows for Port level security • Increased network scalability • Enables Virtual Local Area Networks (VLANs) Switches may have these additional features: <ul style="list-style-type: none"> • Support Virtual Local Area Networks (VLANs) • Support Switch Trunking • Additional security features • Support additional feature sets for a variety of applications according to business needs

ASSOCIATED ARCHITECTURE LEVELS

<i>Specify the Domain Name</i>	Infrastructure
<i>Specify the Discipline Name</i>	Network
<i>Specify the name of the associated Technology Area</i>	Network Hardware

KEYWORDS

<i>List Keywords</i>	Switch, Switching, MAC Address Forwarding, Ports, Data-Link Layer, OSI Model, Subnet, Broadcast Domain, SNMP, TCP, UDP TCP/IP, UDP, Cisco
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VENDOR INFORMATION			
Vendor Name	IBM Global Services	Website	www.ibm.com/easyaccess/mo
Contact Information	IBMCMC@US.IBM.COM		
POTENTIAL COMPLIANCE SOURCES			
Name	Cisco Systems, Inc.	Website	www.cisco.com
Contact Information	Cs-support-us.cisco.com		
Name	Office of Administration	Website	www.oa.state.mo.us
Contact Information	purchmail@mail.state.mo.us		
COMPONENT REVIEW			
List Desirable aspects	<ul style="list-style-type: none"> • Market leader with dominant market share • Leverages training and experience throughout state organizations • Compatible with most industry standards 		
List Undesirable aspects	<ul style="list-style-type: none"> • One Vendor Source • Expensive 		
Operating System	Internetworking Operating System	Platform	Cisco Switches
ASSOCIATED COMPLIANCE COMPONENTS			
Product			
List the Product-specific Compliance Component Names	See www.cisco.com for specific information regarding specific product manuals.		
Configuration Links			
List the Configuration-specific Compliance Component Names	See www.cisco.com for specific information regarding specific configuration and command reference manuals.		
COMPONENT CLASSIFICATION			
Provide the Classification	<input type="checkbox"/> Emerging <input checked="" type="checkbox"/> Current <input type="checkbox"/> Twilight <input type="checkbox"/> Sunset		
Sunset Date			
COMPONENT SUB-CLASSIFICATION			
Sub-Classification	Date	Additional Sub-Classification Information	
<input type="checkbox"/> Technology Watch			
<input type="checkbox"/> Variance			
<input type="checkbox"/> Conditional Use			
RATIONALE FOR COMPONENT CLASSIFICATION			
Document the Rationale for Component Classification	State of Missouri Contract – C202069001		
MIGRATION STRATEGY			
Document the Migration Strategy	State of Missouri Contract – C202069001		

IMPACT POSITION STATEMENT

*Document the Position
Statement on Impact*

This contract affects purchases for any networking equipment from OSI layer 2 switches to OSI layer 3 and higher capable devices.

AGENCIES

*List the Agencies Currently
Utilizing this Product*

All

CURRENT STATUS

Provide the Current Status

☐ *In Development*

☐ *Under Review*

☒ *Approved*

☐ *Rejected*

AUDIT TRAIL

Creation Date

7-2-2004

Date Approved / Rejected

9-14-2004

Reason for Rejection

Last Date Reviewed

Last Date Updated

Reason for Update